



CITY OF SANTA BARBARA

COUNCIL AGENDA REPORT

AGENDA DATE: April 12, 2005

TO: Mayor and Councilmembers

FROM: Creeks Division, Parks and Recreation Department

SUBJECT: CONTRACT WITH ECORP CONSULTING FOR ESTUARY MONITORING

RECOMMENDATION:

That Council approve and authorize the Acting Parks and Recreation Director to execute a professional services contract with ECORP Consulting Inc. in the amount of \$85,235 to conduct focused tidewater goby and Benthic Macroinvertebrate (BMI) surveys in the Arroyo Burro Estuary and Mission Creek Estuary.

DISCUSSION:

In June 2004, the Creeks Division contracted with ECORP Consulting to conduct tidewater goby and BMI surveys at both the Mission Creek/Laguna Channel Estuary and Arroyo Burro Estuary. The surveys were conducted in order to obtain baseline data on the tidewater goby and BMI populations within the estuaries and to determine how tidewater goby and BMI populations interact. The surveys were designed to provide vital baseline information for any potential future water treatment, creek restoration, and lagoon management projects for Arroyo Burro, Mission Creek, and Laguna Channel.

The tidewater goby is a small fish (one-two inches in length) which resides in the Mission Creek, Laguna Channel, and Arroyo Burro Estuaries and is currently on the endangered species list. Tidewater goby feed on specific species of Benthic Macroinvertebrates (BMI), which are aquatic, bottom dwelling insects, crustaceans, worms, and snails living in creeks and estuaries.

The results of the first year studies were very informative. For example, the preliminary findings indicated that while both Arroyo Burro and Mission Creek Estuaries have tidewater goby populations, the Arroyo Burro Estuary population is more abundant. The lower population in Mission Creek Estuary is probably a result of poor habitat conditions (lack of vegetation). In addition, the BMI food sources for the goby were found to be abundant in both estuaries. The results also indicate that the BMI species found within the

REVIEWED BY: _____ Finance _____ Attorney

Agenda Item No. _____

estuaries are very different than those BMI found within the streams above the estuaries, and the BMI populations within these two systems (creek and estuary) exist and reproduce independently of one another. Lastly, during the summer, both estuaries were unnaturally breached by human activity. The data show that these unnatural breaching events reduced both the abundance of tidewater goby and BMI populations within the estuaries.

It should be noted that these findings are preliminary and only include one year of data. In order to confirm these findings it is important that another year of surveys be completed; especially taking into account the record rainfall amounts this year, which may have drastically changed both the tidewater goby and BMI populations within the streams and estuaries.

On March 9, 2005, the Creeks Advisory Committee was presented with the survey results from the first year and concurred with the Creeks Division staff recommendation that a second year of surveys be conducted. A second year of surveys is recommended to continue baseline data collection, confirm the first year findings, and determine the extent of natural variation and year to year population fluctuations.

BUDGET/FINANCIAL INFORMATION:

The total cost of the surveys is \$85,235. This includes 4 tidewater goby surveys in each estuary at a cost of \$38,527 and 8 BMI surveys at each estuary at a cost of \$46,708. ECORP Consulting will prepare a detailed report with survey findings and recommendations. The results will be presented to the Creeks Advisory Committee in spring 2006. Funds for surveys are appropriated in the Creeks Division fiscal year 2005 operating fund.

PREPARED BY: Jill E. Zachary, Creeks Restoration/Clean Water Manager

SUBMITTED BY: Nancy L. Rapp, Acting Parks and Recreation Director

APPROVED BY: City Administrator's Office